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GUIDE SPECIFICATION FOR CONSTRUCTION

Specification revised to meet U.S. Army Reserve requirements (June 2001)

Includes Special Change (Submittal Paragraph)(June 2000)

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SECTION 08353R

ACCORDION AND OPERABLE PARTITIONS 03/02

NOTE: This guide specification covers the requirements for accordion partitions and folding doors. This guide specification is to be used in the preparation of project specifications in accordance with ER 1110-1-8155.

Comments and suggestions on this guide specification are welcome and should be directed to the proponent of the specification. A listing of proponents, including their organization designation and telephone number, is at URL http://www.hnd.usace.army.mil/techinfo/index.htm, and an electronic feedback page for submission of recommended changes is available at the same address. Use of electronic communication is encouraged.

NOTE: RST-08353 is a Louisville District Army
Reserve Support Ream (RST) version of CEGS-08353.

Any text changed by the RST is underlined. Refer
all specification comments to the RST.

PART 1 GENERAL

NOTE: Facilities not excluded by TI 800-01 Design Criteria will be accessible in accordance with 36 CFR, Part 1191, Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities.

Drawings will indicate location, dimensions, content, details, and such other information as required to indicate the extent of the work.

1.1 REFERENCES

NOTE: Issue (date) of references included in project specifications need not be more current than provided by the latest change (Notice) to this guide specification.

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM E 84	(1999) Surface Burning Characteristics of Building Materials
ASTM E 90	(1999) Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions
ASTM E 413	(1987; R 1999) Rating Sound Insulation
ASTM F 793	(1993; Rev 1998) Standard Classification of Wallcovering by Durability Characteristics

NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)

NEMA LD 3 (1995) High-Pressure Decorative Laminates

1.2 SUBMITTALS

NOTE: Submittals must be limited to those necessary for adequate quality control. The importance of an item in the project should be one of the primary factors in determining if a submittal for the item should be required.

Indicate submittal classification in the blank space following the name of the item requiring the

submittal by using "G" when the submittal requires Government approval. Submittals not classified as "G" will show on the submittal register as "Information Only". For submittals requiring Government approval, a code of up to three characters should be used following the "G" designation to indicate the approving authority; codes of "RE" for Resident Engineer approval, "ED" for Engineering approval, and "AE" for Architect-Engineer approval are recommended.

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

Accordion Partitions; FIO

Drawings containing complete schematic diagrams and details required to demonstrate that the system has been coordinated and will properly function as a unit. Drawings shall show proposed layout and anchorage of equipment and appurtenances, and equipment relationship to other parts of the work including clearances for maintenance and operation.

SD-03 Product Data

Operable Partition; See Section 09915 COLOR SCHEDULE; FIO

Operable Partition Manuf. Product submitted as an "or equal"; G [___].

Manufacturer's descriptive data, performance charts, catalog cuts, and installation instructions.

SD-04 Samples

Accordion Partitions; FIO

Manufacturer's standard color samples of specified surfaces and finishes.

SD-07 Certificates

Materials; FIO Accordion Partitions; FIO

Certificate attesting that the materials meet the requirements specified and that partitions have specified acoustical and flame retardant properties, as determined by test.

SD-10 Operation and Maintenance Data

Accordion Partitions; FIO

[Six] [_____] complete copies of operating instructions outlining the procedures required for electrically operated partitions. The instructions shall include the manufacturer's name, model number, service manual, parts list, and brief description of all equipment and operating features. Data shall include a complete list of parts and supplies, with current unit prices and source of supply, and a list of the parts recommended by the manufacturer to be replaced after [1 year] [and] [3 years] of service.

[Six] [____] complete copies of maintenance instructions explaining routine maintenance procedures including inspection, adjustments, lubrication, and cleaning. The instructions shall list possible breakdown, methods of repair, and a troubleshooting guide. The instructions shall include equipment layout and simplified wiring and control diagrams of the system as installed.

1.3 DELIVERY AND STORAGE

Materials shall be delivered to the jobsite in the manufacturer's original, unopened packages and shall be stored with protection from the weather, humidity and temperature variations, dirt and dust, or other contaminants.

1.4 WARRANTY

Manufacturer's standard performance guarantees or warranties that extend beyond a 1 year period shall be provided.

PART 2 PRODUCTS

NOTE: Folding doors (serpentine) are economical, easy to operate, non STC rated doors basically for sight division of spaces.

Accordion partitions are generally more durable and can be made for larger openings. Accordion partitions are available with a variety of finishes and are available with or without STC ratings and are better suited to sight division application than the folding doors (serpentine). Doors may be specified to be manually or electrically operated.

A protective pocket for storage of the door in the stacked position should be provided if doors are located in areas susceptible to damage.

Edit the following paragraphs to specify one or both types of partitions as appropriate for the project. Delete items not applicable.

2.1 MATERIALS

Material and equipment shall be the standard products of a manufacturer regularly engaged in the manufacture of such products and shall essentially duplicate items that have been in satisfactory use for at least 2 years prior to bid opening. Equipment shall be supported by a service organization that is, in the opinion of the Contracting Officer, reasonably convenient to the site. Door and partition finishes shall have a Class A rating when tested in accordance with ASTM E 84.

2.1.1 Vinyl Covering

The vinyl coated fabric shall conform to ASTM F 793, Category V, Type II (Medium duty). Covering shall have [wood grain] [textured] design.

2.1.2 Plastic Laminate

Plastic laminate shall conform to NEMA LD 3, 1.5 mm 1/16 inchminimum thickness, [wood grain] [patterned] [solid color] finish.

2.1.3 Wood Veneer

Wood veneer shall be [[Good Grade] [Premium Grade, book matched]] [birch] [red oak] [American walnut] [] hardwood.

2.1.4 Wall Carpet Surfacing

Wall carpet surfacing shall be a vertically-ribbed acoustical synthetic fiber material. Pile height shall be minimum 2.5 mm 0.098 inch thickness.

2.1.5 Hardware

Accordion partitions shall be furnished with grip handles with [latch only] [privacy button one side and slotted release on opposite side] [key lock one side and privacy button on opposite side] [key locks on both sides] [master-keyed one-side and privacy button opposite side] [master-keyed housing both sides]. An upper latch with extended pulls shall be provided on units over 2400 mm 8 feet high. Hardware shall be anodized aluminum with a satin natural chrome finish, chrome plated or brass plated metal, or painted finish or stainless steel.

2.1.6 Sweep Strips

Sweep strips shall be vinyl or other material which will not crack or craze with severe usage. Sweep strip shall control STC to the specified rating.

2.1.7 Track

Track shall be [recessed] [or] [surface mounted] [as shown] and shall be of extruded aluminum or enamel finish steel. Track shall be manufacturer's standard product designed for the weight of door or partition furnished. Track sections shall be provided in the maximum lengths practicable, not less than 1800 mm 6 feet long except for narrow doors and at ends of runs where short length is required. Suitable joint devices such as interlocking keys shall be provided at each joint to provide permanent alignment of track.

2.1.8 Metal Soffit

Soffit shall be provided when steel track is recessed. Soffit shall be of metal of adequate thickness to protect the ceiling from damage by door operation and shall be provided with the door manufacturer's standard neutral-color applied finish. Soffit on aluminum track shall be an integral part of the track.

2.2 ACCORDION PARTITIONS

Accordion partitions shall consist of top hung ball bearing carriers which support a system of center stacking hinged folding panels with a durable surface finish. Partitions shall have perimeter and jamb seals which shall provide the indicated STC rating. Ferrous metal parts shall be either cadmium plated or zinc coated and post shall have manufacturer's standard shop finish paint. Partitions doors shall be [manually] [electrically] operated. Door widths shall be as shown.

2.2.1 Pantograph Framework with Flexible Covering

Accordion partitions shall have a steel pantograph hinged framework and shall [be non-STC rated] [have a sound liner and shall meet the STC rating of [35] [39] [40] in accordance with ASTM E 90 and ASTM E 413]. Intermediate pantographs shall be provided as required and door shall have a control device to prevent flattening of the folds when the panel is fully extended. The covering shall be [vinyl coated fabric] [wall carpet] [].

2.2.2 Wood Core Panels

Accordion partitions shall have bracketed supports or bracketed hinged steel yoke supports with engineered wood core panels surfaced with [architectural wood veneer] [plastic laminate] [vinyl wall covering] [wall carpet]. Panels shall be hinged and sealed to reduce sound. The STC rating shall be [35] [30] [44] [50] [_____] in accordance with ASTM E 90 and ASTM E 413.

2.2.3 Steel Panels

Accordion partitions shall be vinyl-clad cold rolled $\underline{\text{minimum .85mm}}$ steel panels connected by full length $\underline{\text{stainless}}$ steel hinges. Inner surface of the panels shall be covered with insulating material. A spacing chain shall be provided to control panel spacing and extension. The STC rating of the partition shall be [44] $\underline{50}$ in accordance with ASTM E 90 and ASTM E 413. The partitions shall have a maximum flame spread of 25 and maximum

smoke developed rating of 50 in accordance with ASTM E 84.

2.3 FOLDING DOORS

Folding doors (Serpentine) shall consist of lightweight engineered wood core panels supported by top hung nylon tired ball bearing carriers. Panels shall be 10 mm 0.38 inches minimum thick particle board continuously connected by extruded vinyl hinges. Panels shall have factory applied vinyl finish. Folding door system shall be non-STC rated. Doors shall be manually operated. Door widths shall be as shown.

2.4 ELECTRICAL OPERATORS

NOTE: The two key controls for the electrical operator should be located on opposite sides of the room and opposite ends of the partition and should have a clear, unobstructed view of both sides of the partition even when the partition is extended.

Electrical operator shall be furnished and installed where indicated. Operation shall cause retraction of seals providing minimum 25 mm 1 inch clearance with the floor. Final closing movement shall automatically seal the partition in place without the use of supplementary manually operated devices. Operation shall be two key controls wired in series and located on opposite sides of the room and opposite ends of the partition. Minimum travel speed shall be 15 mm/second. 30 fpm.Operator shall have motor adequate for partition weight, complete with speed reducer, friction clutch, relays, limit switches, and an emergency release mechanism to permit manual operation.

2.5 SAFETY DEVICE

The leading edge of electrically operated doors shall have [an electric] [a pneumatic] safety device that will immediately reverse the door movement upon contact with an obstruction and cause the door to return to its full open position.

2.6 COLOR

Color shall be in accordance with Section 09915 COLOR SCHEDULE.

PART 3 EXECUTION

3.1 INSTALLATION

Installation shall be in accordance with the manufacturer's approved installation instructions. Confirm floor flatness of 3.18 mm in 3000 mm and wall plumbness of 3.18 in 3000 mm, both non-cumulative. Fit and align all panels. Electrical work shall conform to Section 16415 ELECTRICAL WORK, INTERIOR.

-- End of Section --